



World Resources Company

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7006

October 12, 2004

Mr. Gerald Thompson
Environmental Assistant
ALASKAN COPPER WORKS
P. O. Box 3546
SEATTLE, WA 98124-3546

Dear Mr. Thompson:

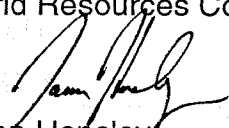
In accordance with the recycling Agreement with your company, World Resources Company (WRC) provides a "RECYCLABLE MATERIAL PROFILE" (RMP) each contract year. Enclosed, for your records, is a completed RMP for the material generated at your plant. If a qualifier is indicated on the RMP, WRC has provided a quality assurance/quality control case narrative to validate the constituent's result(s).

The concentration of metals reported on the RMP is the total concentration of each metal on a dry basis. The recyclable material is prepared for analysis by first grid-sampling and then drying the selected sample in the laboratory oven at 103°-105° centigrade in order to obtain a homogeneous dry sample (Standard Methods For The Examination of Water and Wastewater, 15th Edition, published by the American Public Health Association 1980, Method 209A "Total Residue at 103°-105° centigrade"). Therefore, these results are generally higher than the concentrations of your material as it leaves your facility. You should multiply these dry concentrations by the decimal form of your percent solids (i.e. 50.0% = 0.50) to obtain the concentration of your material as it leaves your plant.

WRC appreciates your business and looks forward to a long and mutually beneficial recycling relationship. Please feel free to call me at (800) 972-1955 with any questions you may have regarding the enclosed RMP. Thank you for your interest in recycling.

Sincerely,

World Resources Company



Jason Hensley
Laboratory Manager

Enclosures

World Resources Company

Form: FM-M01

RECYCLABLE MATERIAL PROFILE

EXHIBIT A

Generator Name: ALASKAN COPPER WORKS

Company I.D. #: W2149A

A. Generator Information

1. Address: 3200 SIXTH AVENUE SOUTH

3. Material EPA Waste Code: F006

SEATTLE

4. Generator's EPA I.D. Number: WAD980738546

WA

98124

2. Contact: Gerald Thompson

5. Generator's State I.D. Number:

Title: Environmental Assistant

B. Recyclable Material Characteristics

1. Color(s): Brown

6. Texture (similar to)

7. Appearance

9. Free Liquids (EPA SW 846, Method 9095)

☒ Wet Clay

☒ Homogenous

☒ Not Present

☐ Present

2. Odor (none, mild, strong)

☐ Dry Clay

☐ Bilayered

10. Debris

11. Reactivity

None

☐ Sand

☒ Not Present

☒ Not Reactive

Description of Odor:

☐ Powder

☐ Present

☐ Reactive

☐ Other

☐ Multilayered

3. Moisture (wet, damp, dry)

8. Organic Vapors

☐ Present

12. Radionuclides (ASTM D5928-96)

Wet

☒ Not Present (< 1ppm) If present, identify compounds and amount in ppm on a wet basis.

☒ Not Detected

☐ Detected

Percent Solids: 22.8

4. pH

5. Ignitability

☒ Pass

13. Cyanide Gas HCN

(EPA SW 846, method 9040/9045)
pH: 8.34

(40 CFR § 261.21)
☒ PASS
☐ FAIL

☐ Fail

☒ Not Detected

☐ Detected _____ ppm

C. Analytical Data

(Content on a dry weight basis in ppm or %)

Constituent *	Content	Qualifier	Constituent *	Content	Qualifier
1. Aluminum ¹	Al	10732.5 ppm	19. Magnesium ¹	Mg	1983.7 ppm
2. Antimony ¹	Sb	< 25.0 ppm	20. Manganese ¹	Mn	5165.8 ppm
3. Arsenic ¹	As	66.3 ppm	21. Mercury ¹	Hg	1.2 ppm M2
4. Barium ¹	Ba	60.5 ppm	22. Nickel ¹	Ni	61890.8 ppm
5. Beryllium ¹	Be	< 10.0 ppm M2	23. Selenium ¹	Se	< 50.0 ppm
6. Bismuth ¹	Bi	42.0 ppm	24. Silver ¹	Ag	< 5.0 ppm
7. Cadmium ¹	Cd	< 10.0 ppm	25. Thallium ¹	Tl	< 25.0 ppm
8. Calcium ¹	Ca	8379.3 ppm M3	26. Tin ¹	Sn	< 100.0 ppm M3
9. Chloride ⁴	Cl ⁻	0.06 %	27. Zinc ¹	Zn	954.0 ppm M3
10. Chromium, Hexavalent ²	Cr ⁺⁶	1288.4 ppm			
11. Chromium, Total ¹	Cr	50349.2 ppm M3			
12. Cobalt ¹	Co	697.9 ppm M3			
13. Copper ¹	Cu	55388.8 ppm			
14. Cyanide, Amenable ³	CN ⁻	not analyzed			
15. Cyanide, Total ³	CN ⁻	< 43.9 ppm Z3			
16. Fluoride ⁴	F ⁻	0.88 %			
17. Iron ¹	Fe	269957.8 ppm M3			
18. Lead ¹	Pb	108.8 ppm			

* Analytical Procedure References

1. EPA Method SW846 3050 / 6010 (Digestion / Analysis)
2. EPA Method SW846 3060 / 7196 (Extraction / Analysis)
3. EPA Method SW846 9010 / 9213 or 9014 (Distillation / Analysis)
4. HNO₃ or H₂O₂ / EPA Method SW846 9056 (Digestion / Analysis)

D. Certification

I hereby certify that all information submitted in this profile is complete and accurate to the best of my knowledge and belief.

Signed: 

Date: 10/12/04

Title: Laboratory Manager

AZ DHS #: AZ0586

World Resources Company

Form: FM-M01

QA/QC DATA

EXHIBIT A

Generator Name: ALASKAN COPPER WORKS

Company I.D. #: W2149A

QA/QC Criteria: All analyses met method criteria unless otherwise noted.

Explanation of Data Qualifiers:

- | | |
|-----------|---|
| M2 | Matrix spike recovery was low, the method control sample recovery was acceptable. |
| Z3 | The duplicate sample did not meet method acceptance limits due to the lack of sample homogeneity. |
| M3 | The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level.
The method control sample recovery was acceptable. |

World Resources Company

Form: FM-M01

SAMPLE COLLECTION & ANALYSIS COMPLETION DATES

EXHIBIT A

Generator Name: ALASKAN COPPER WORKS

Company I.D. #: W2149A

Constituent		Sample Date	Completion Date	Sample Technician
1. Aluminum	Al	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
2. Antimony	Sb	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
3. Arsenic	As	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
4. Barium	Ba	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
5. Beryllium	Be	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
6. Bismuth	Bi	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
7. Cadmium	Cd	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
8. Calcium	Ca	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
9. Chloride	Cl ⁻	02/10/2004 12:51	02/11/2004 12:00	KEVIN MCALISTER
10. Chromium, Hexavalent	Cr ⁺⁶	02/10/2004 12:51	02/17/2004 12:00	KEVIN MCALISTER
11. Chromium, Total	Cr	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
12. Cobalt	Co	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
13. Copper	Cu	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
14. Cyanide, Amenable	CN ⁻			
15. Cyanide, Total	CN ⁻	02/10/2004 12:51	02/12/2004 12:00	KEVIN MCALISTER
16. Fluoride	F ⁻	02/10/2004 12:51	02/11/2004 12:00	KEVIN MCALISTER
17. Iron	Fe	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
18. Lead	Pb	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
19. Magnesium	Mg	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
20. Manganese	Mn	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
21. Mercury	Hg	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
22. Nickel	Ni	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
23. Selenium	Se	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
24. Silver	Ag	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
25. Thallium	Tl	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
26. Tin	Sn	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER
27. Zinc	Zn	02/10/2004 12:51	03/08/2004 17:47	KEVIN MCALISTER